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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for generating one or more Ethernet frames having a maximum length and a maximum payload from a Fibre Channel ("FC") frame having a frame length and for transmitting said FC frame over a Gigabit an Ethernet network to an intended destination, said method comprising the steps of:

(a) determining whether said FC frame length is smaller than said Ethernet frame maximum payload and if so generating an Ethernet frame wherein its payload comprises said FC frame and transmitting said Ethernet frame including said FC frame over said Ethernet network to said intended destination, and if not then performing steps (b) through (f);

(b) dividing said FC frame Frame into at least a first FC fragment and a second FC fragment, wherein each of said first FC fragment and said second FC fragment is smaller than said Ethernet frame maximum payload;

(c) generating a storage transport layer field comprising said FC frame length;

(d) generating a first Ethernet Frame frame comprising said storage transport layer field and said first FC fragment;

(e) generating a second Ethernet Frame frame comprising said second FC fragment; and

(f) transmitting said first Ethernet frame and said second Ethernet frame Frames including said FC frame first FC fragment and said second FC fragment therein over said Ethernet network to enable said first FC fragment and said second FC fragment fragments to be reassembled at said intended destination.

2. (Original) The method of Claim 1, wherein Transmission Control Protocol performs steps (a) through (c).

3. (Original) The method of Claim 1, wherein said first FC fragment comprises a start of frame field, a frame header field, an optional header field, a first portion of an FC frame

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payload field and said second FC fragment comprises a second portion of said FC frame payload field, a Cyclic Redundancy Check field and an End of Frame field.

4.   (Currently Amended) A method for generating two Ethernet frames having a maximum length and a maximum payload from a Fibre Channel ("FC") frame having a frame length and for transmitting said FC frame over a Gigabit an Ethernet network to an intended destination, said method comprising the steps of:

(a) determining that said FC frame length is larger than said Ethernet frame maximum payload;

(b) dividing said FC Frame frame into a first FC fragment and a second FC fragment, wherein each of said first FC fragment and said second FC fragment is smaller than said Ethernet frame maximum payload;

(c) generating a storage transport layer field comprising said FC frame length;

(d) generating a first Ethernet Frame frame comprising said storage transport layer field and said first FC fragment;

(e) generating a second Ethernet Frame frame comprising said second FC fragment; and

(f) transmitting said first Ethernet frame and said second Ethernet frame Frames including said first FC fragment and said second FC fragment fragments over said Ethernet network to enable said FC frame to be reassembled from said first FC fragment and said second FC fragment at said intended destination.

5.   (Currently Amended) A method for generating an Ethernet frame frames having a maximum length and a maximum payload from a Fibre Channel ("FC") frame having a frame length and for transmitting said FC frame over the an Ethernet network to an intended destination, said method comprising the steps of:

(a)   determining that said FC frame length is smaller than said Ethernet frame maximum payload;

(b)   generating an said Ethernet frame wherein its payload comprises said FC frame;

(c)   generating a storage transport layer field containing said frame length; and

(e) (d) transmitting said Ethernet frame including said FC frame and said storage transport layer field over the Ethernet network to said intended destination.

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6.   (Currently Amended) A Transmission Control Protocol/Internet Protocol ("TCP/IP")
protocol stack having a transport layer for transferring over a Gigabit an Ethernet network one or
more FC frames having a frame size for each of said FC frames, the improvement comprising
said transport layer comprising a storage transport layer, wherein said storage transport layer
enables said transport layer to be operative for:

    determining based upon said frame size of a given FC frame whether to generate one
Ethernet frame or two a plurality of Ethernet frames, said one Ethernet frame or two said
plurality of Ethernet frames comprising a payload that includes said given FC frame; and

    transmitting said given FC frame in one of said one Ethernet frame or two said plurality
of Ethernet frames Frames including said given FC frame over said Ethernet network to an
intended destination; and

    enabling, if said plurality of Ethernet frames are necessary to transmit said given FC
frame as a plurality of FC fragments to said intended destination, said given FC frame to be
reassembled from said plurality of FC fragments in said two plurality of Ethernet frames at said
intended destination.

7.   (Currently Amended) The TCP/IP protocol stack of Claim 1 6, wherein said storage
transport protocol layer comprises a frame length field that corresponds to said frame length of
said given FC frame, and said storage transport layer further comprises a checksum filed field for
error checking of said storage transport layer.

8.   (New) The method of claim 1 wherein said frame length is provided only in the storage
transport layer field of the first Ethernet frame.

9.   (New) The method of claim 1 wherein said storage transport layer field further includes a
checksum configured to perform error checking on said storage transport layer field.

10.   (New) The method of claim 9 wherein said checksum represents an inverted frame
length.

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12.   (New). The method of claim 1 wherein said storage transport layer field is 4 bytes long.

13.   (New). The method of claim 1 wherein said Ethernet network represents a gigabit Ethernet network.

14.   (New) The method of claim 4 wherein said frame length is provided only in the storage transport layer field of the first Ethernet frame.

15.   (New) The method of claim 4 wherein said storage transport layer field further includes a checksum configured to perform error checking on said storage transport layer field.

16.   (New) The method of claim 15 wherein said checksum represents an inverted frame length.

17.   (New). The method of claim 4 wherein said storage transport layer field is 4 bytes long.

18.   (New). The method of claim 4 wherein said Ethernet network represents a gigabit Ethernet network.

19.   (New) The method of claim 5 wherein said storage transport layer field further includes a checksum configured to perform error checking on said storage transport layer field.

20.   (New) The method of claim 13 wherein said Ethernet network represents a gigabit Ethernet network.